
DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2006-23883; Directorate Identifier 2006-CE-12-AD; Amendment 39-14722; AD 2006-17-01]

RIN 2120-AA64

Airworthiness Directives; Mitsubishi Heavy Industries MU-2B Series Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA adopts a new airworthiness directive (AD) for all Mitsubishi Heavy Industries (MHI) MU-2B series airplanes. This AD requires you to incorporate power assurance charts into the Limitations Section of the Airplane Flight Manual (AFM), inspect the engine torque indication system, and recalibrate the torque pressure transducers as required. This AD results from a recent safety evaluation that used a data-driven approach to analyze the design, operation, and maintenance of the MU-2B series airplanes in order to determine their safety and define what steps, if any, are necessary for their safe operation. Part of that evaluation was the identification of unsafe conditions that exist or could develop on the affected type design airplanes. We are issuing this AD to detect and correct torque transducers that are out of calibration. The above issue, if uncorrected, could result in degraded performance and poor handling qualities with consequent loss of control of the airplane in certain situations.

DATES: This AD becomes effective on September 22, 2006.

As of September 22, 2006, the Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulation.

ADDRESSES: To get the service information identified in this AD, contact Mitsubishi Heavy Industries America, Inc., 4951 Airport Parkway, Suite 800, Addison, Texas 75001; telephone: (972) 934-5480; facsimile: (972) 934-5488.

To view the AD docket, go to the Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-0001 or on the Internet at <http://dms.dot.gov>. The docket number is FAA-2006-23883; Directorate Identifier 2006-CE-12-AD.

FOR FURTHER INFORMATION CONTACT: Rao Edupuganti, Aerospace Engineer, ASW-150, Fort Worth Aircraft Certification Office, 2601 Meacham Blvd., Fort Worth, Texas 76193; telephone: (817) 222-5284; facsimile: (817) 222-5960.

SUPPLEMENTARY INFORMATION:

Discussion

On April 21, 2006, we issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to all Mitsubishi Heavy Industries (MHI) MU-2B series airplanes. This proposal was published in the Federal Register as a notice of proposed rulemaking (NPRM) on April 28, 2006 (71 FR 25120). The NPRM proposed to detect and correct torque transducers that are out of calibration. The above issue, if uncorrected, could result in degraded performance and poor handling qualities with consequent loss of control of the airplane in certain situations.

Comments

We provided the public the opportunity to participate in developing this AD. The following presents the comments received on the proposal and FAA's response to each comment:

Comment Issue No. 1: Revise the Manufacturer Contact Information

Ralph Sorrells, Deputy General Manager of Mitsubishi Heavy Industries America, Inc., requests that we revise the manufacturer contact information from Mitsubishi Heavy Industries in Nagoya, Japan, to Mitsubishi Heavy Industries America, Inc. in Addison Texas.

We agree with the commenter and will incorporate the change into this final rule AD action.

Comment Issue No. 2: Correct the Date of the Japanese AD

Ralph Sorrells, Deputy General Manager of Mitsubishi Heavy Industries America, Inc., requests that we correct the date of Japanese AD No. TCD 4889-98 from October 7, 1998, to November 5, 1998.

We agree with the commenter and will incorporate the change into this final rule AD action.

Comment Issue No. 3: Remove Long-Body Models From Table 1, Paragraph (c)(1)

The airplanes described in Table 1, paragraph (c)(1) are short-body airplanes. Models MU-2B-30, MU-2B-35, and MU-2B-36 are long-body airplanes.

Ralph Sorrells, Deputy General Manager of Mitsubishi Heavy Industries America, Inc., requests that we remove reference of the long-body airplanes from Table 1, paragraph (c)(1).

We agree with the commenter and will incorporate the change into this final rule AD action.

Comment Issue No. 4: Add the Following Rows to TABLE 3.—AFM INSERTION PAGES:

Ralph Sorrells, Deputy General Manager of Mitsubishi Heavy Industries America, Inc., request that we add the following rows to TABLE 3.—AFM INSERTION PAGES:

MU-2B-25	AFM, Section 6, Revision 9, dated January 14, 1999.	6-19
MU-2B-26	AFM, Section 6, Revision 9, dated January 14, 1999.	6-19
MU-2B-35	AFM, Section 6, Revision 10, dated January 14, 1999.	6-19

We agree with the commenter and will incorporate the change into this final rule AD action.

Conclusion

We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed except for the changes above and minor editorial corrections. We have determined that these changes and minor corrections:

Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and

Do not add any additional burden upon the public than was already proposed in the NPRM.

Costs of Compliance

We estimate that this AD affects 397 airplanes in the U.S. registry.

We estimate the following costs to accomplish the inspection:

Labor Cost	Parts Cost	Total Cost Per Airplane	Total Cost on U.S. Operators
5 work-hours X \$80 = \$400	Not applicable	\$400	\$158,800

The FAA is committed to updating the aviation community of expected costs associated with the MU-2B series airplane safety evaluation conducted in 2005. As a result of that commitment, the accumulating expected costs of all ADs related to the MU-2B series airplane safety evaluation may be found in the Final Report section at the following Web site:

http://www.faa.gov/aircraft/air_cert/design_approvals/small_airplanes/cos/mu2_foia_reading_library/.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106 describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this AD.

Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this AD (and other information as included in the Regulatory Evaluation) and placed it in the AD Docket.

You may get a copy of this summary by sending a request to us at the address listed under ADDRESSES. Include "Docket No. FAA-2006-23883; Directorate Identifier 2006-CE-12-AD" in your request.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. FAA amends § 39.13 by adding a new AD to read as follows:

AIRWORTHINESS DIRECTIVE

www.faa.gov/aircraft/safety/alerts/
www.gpoaccess.gov/fr/advanced.html

U.S. Department
of Transportation
**Federal Aviation
Administration**



2006-17-01 Mitsubishi Heavy Industries: Amendment 39-14722; Docket No. FAA-2006-23883; Directorate Identifier 2006-CE-12-AD.

Effective Date

- (a) This AD becomes effective on September 22, 2006.

Affected ADs

- (b) None.

Applicability

- (c) This AD affects the following airplane models and serial numbers that are certificated in any category:

Table 1.—Applicability

Type Certificate	Models	Serial Numbers
(1) A2PC	MU-2B, MU-2B-10, MU-2B-15, MU-2B-20, MU-2B-25, and MU-2B-26	008 through 312, 314 through 320, and 322 through 347
(2) A2PC	MU-2B-30, MU-2B-35, and MU-2B-36	501 through 651, 653 through 660, and 662 through 696
(3) A10SW	MU-2B-25, MU-2B-26, MU-2B-26A, and MU-2B-40	313SA, 321SA, and 348SA through 459SA
(4) A10SW	MU-2B-35, MU-2B-36, MU-2B-36A, and MU-2B-60	652SA, 661SA, and 697SA through 1569SA

Unsafe Condition

(d) This AD is the result of a recent safety evaluation that used a data-driven approach to analyze the design, operation, and maintenance of the MU-2B series airplanes in order to determine their safety and define what steps, if any, are necessary for their safe operation. Part of that evaluation was the identification of unsafe conditions that exist or could develop on the affected type design airplanes. The actions specified in this AD are intended to detect and correct torque transducers that are out of calibration. The above issue, if uncorrected, could result in degraded performance and poor handling qualities and lead to loss of control of the airplane in certain situations.

Compliance

- (e) To address this problem, you must do the following:

Table 2.—Actions/Compliance/Procedures

Actions	Compliance	Procedures
(1) Incorporate the following pages from the Airplane Flight Manual (AFM) charts listed in TABLE 3.—AFM INSERTION PAGES, paragraph (f) of this AD, into the Limitations Section of the FAA-approved AFM.	Within 100 hours time-in-service (TIS) after September 22, 2006 (the effective date of this AD).	The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may do the flight manual changes requirement of this AD. Make an entry into the aircraft records showing compliance with this portion of the AD in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).
(2) Inspect the engine torque indication system and recalibrate the torque pressure transducers as required. This inspection requires the use of the power assurance charts referenced in paragraph (e)(1) of this AD and in TABLE 3, paragraph (f) of this AD.	Within 100 hours TIS after September 22, 2006 (the effective date of this AD).	(i) For airplanes listed in Type Certificate No. A2PC follow Mitsubishi Heavy Industries, Ltd. (MHI) MU-2 Service Bulletin No. 233A, dated January 14, 1999. (ii) For airplanes listed Type Certificate No. A10SW follow MHI MU-2 Service Bulletin No. 095/77-002, dated July 15, 1998.

(f) Use the following power assurance charts when doing the ground check portion of the inspection required in paragraph (e)(2) of this AD.

Table 3.—AFM Insertion Pages

Model of Airplane Affected	Date and Version of AFM	Page Number from AFM
(i) MU-2B	AFM, Section 6, Revision 9, dated January 14, 1999.	6-34
(ii) MU-2B-15	AFM, Section 6, Revision 9, dated January 14, 1999.	6-19
(iii) MU-2B-20	AFM, Section 6, Revision 9, dated January 14, 1999.	6-20
(iv) MU-2B-25	AFM, Section 6, Reissued March 25, 1986; and AFM, Section 6, Revision 9, dated January 14, 1999.	6-18 and 6-19 6-19
(v) MU-2B-26	AFM, Section 6, Reissued March 25, 1986; and AFM, Section 6, Revision 9, dated January 14, 1999.	6-17 and 6-18 6-19
(vi) MU-2B-26A	AFM, Section 6, Reissued March 25, 1986.	6-17 and 6-18
(vii) MU-2B-35	AFM, Section 6, Reissued March 25, 1986; and AFM, Section 6, Revision 9, dated January 14, 1999.	6-18 and 6-19 6-19
(viii) MU-2B-36A	AFM, Section 6, Reissued February 28, 1986.	6-20 and 6-21
(ix) MU-2B-40	AFM, Section 6, Reissued March 25, 1986.	6-17 and 6-18
(x) MU-2B-60	AFM, Section 6, Reissued September 24, 1985.	6-19 and 6-20
(xi) MU-2B-10	AFM, Section 6, Revision 9, dated January 14, 1999	6-19
(xii) MU-2B-30	AFM, Section 6, Revision 10, dated January 14, 1999	6-19
(xiii) MU-2B-36	AFM, Section 6, Revision 9, dated January 14, 1999	6-20

Note: AFM, Section 6, Reissued March 25, 1986 (FAA-approved) TCDS A10SW. AFM, Section 6, Revision 9 and Revision 10, dated January 14, 1999 (JCAB-approved).

Alternative Methods of Compliance (AMOCs)

(g) The Manager, Fort Worth Aircraft Certification Office, FAA, ATTN: Rao Edupuganti, Aerospace Engineer, ASW-150, Fort Worth ACO, 2601 Meacham Blvd., Fort Worth, Texas 76193; telephone: (817) 222-5284; facsimile: (817) 222-5960, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

Related Information

(h) Japan Civil Aviation Bureau Airworthiness Directive No. TCD 4889-98, dated November 5, 1998, also addresses the subject of this AD.

Material Incorporated by Reference

(i) You must do the actions required by this AD following the instructions in Mitsubishi Heavy Industries, Ltd. MV-2 Service Bulletins No. 233A, dated January 14, 1999; and No. 095/77-002, dated July 15, 1998. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To get a copy of this service information, contact Mitsubishi Heavy Industries America, Inc., 4951 Airport Parkway, Suite 800, Addison, Texas 75001; telephone: (972) 934-5480; facsimile: (972) 934-5488. To review copies of this service information, go to the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html or call (202) 741-6030. To view the AD docket, go to the Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-0001 or on the Internet at <http://dms.dot.gov>. The docket number is FAA-2006-23883; Directorate Identifier 2006-CE-12-AD.

Issued in Kansas City, Missouri, on August 9, 2006.

John R. Colomy,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. E6-13441 Filed 8-17-06; 8:45 am]